

William R. Wiley
**Environmental Molecular Sciences
Laboratory Overview**

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Director
**Environmental Molecular
Sciences Laboratory**

EMSL is a National Scientific User Facility

William R. Wiley's Vision:
An innovative multipurpose user facility providing
“synergism between the physical, mathematical, and life sciences.”

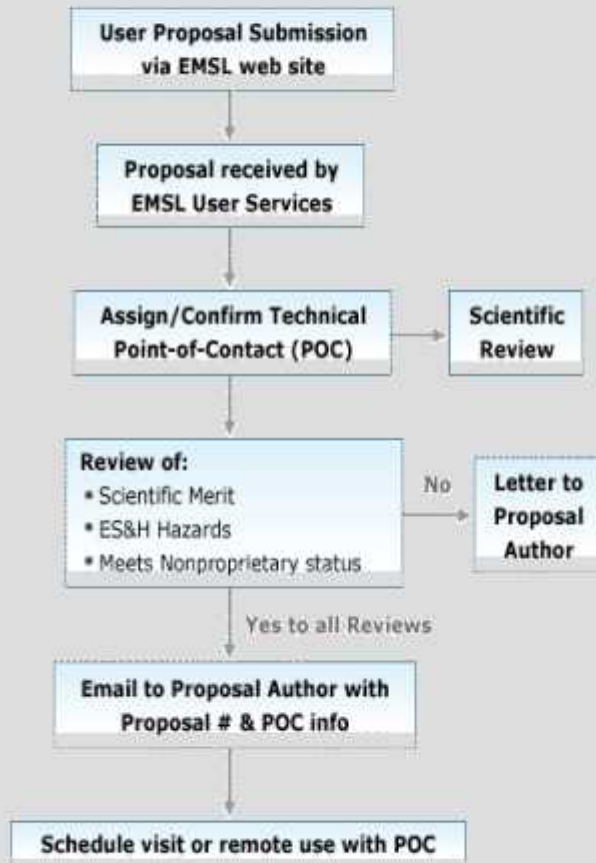


Mission

EMSL, a national scientific user facility at Pacific Northwest National Laboratory, provides integrated experimental and computational resources for discovery and technological innovation in the environmental molecular sciences to support the needs of DOE and the nation.

EMSL is Open to Users Around the World

Scientists around the world can access the resources at EMSL through a peer-reviewed-proposal system



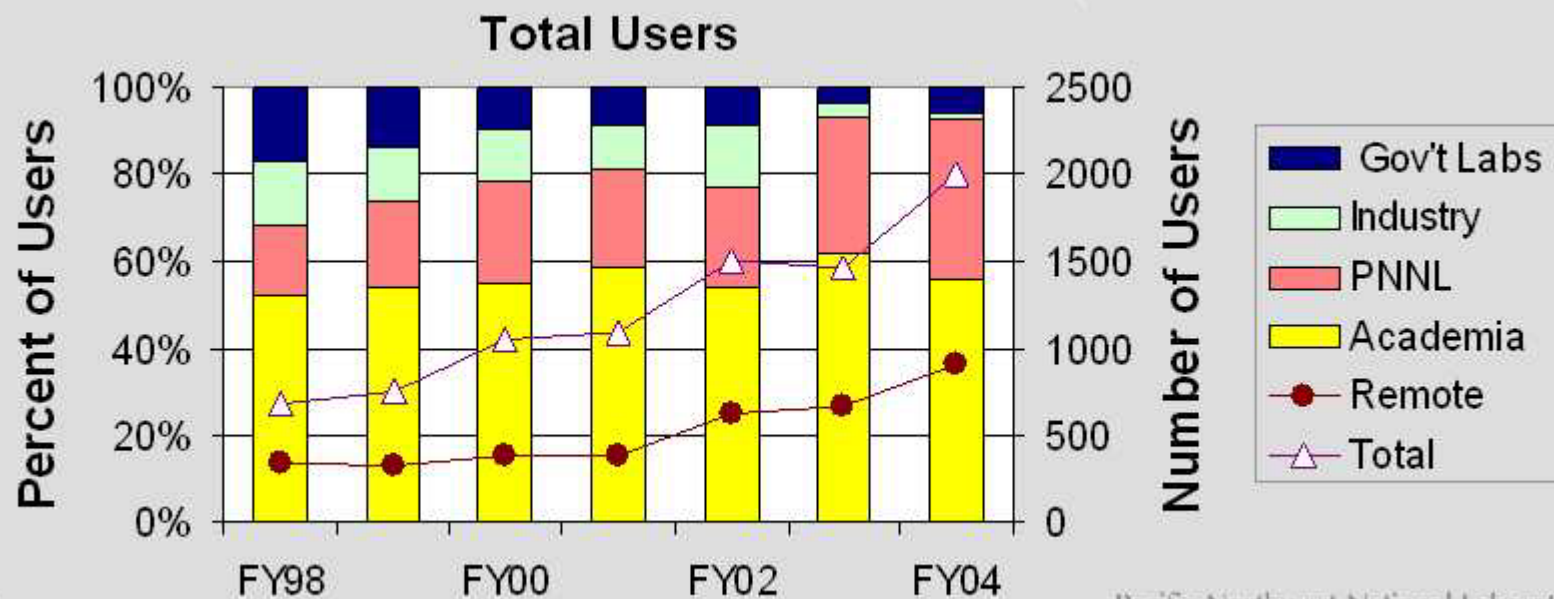
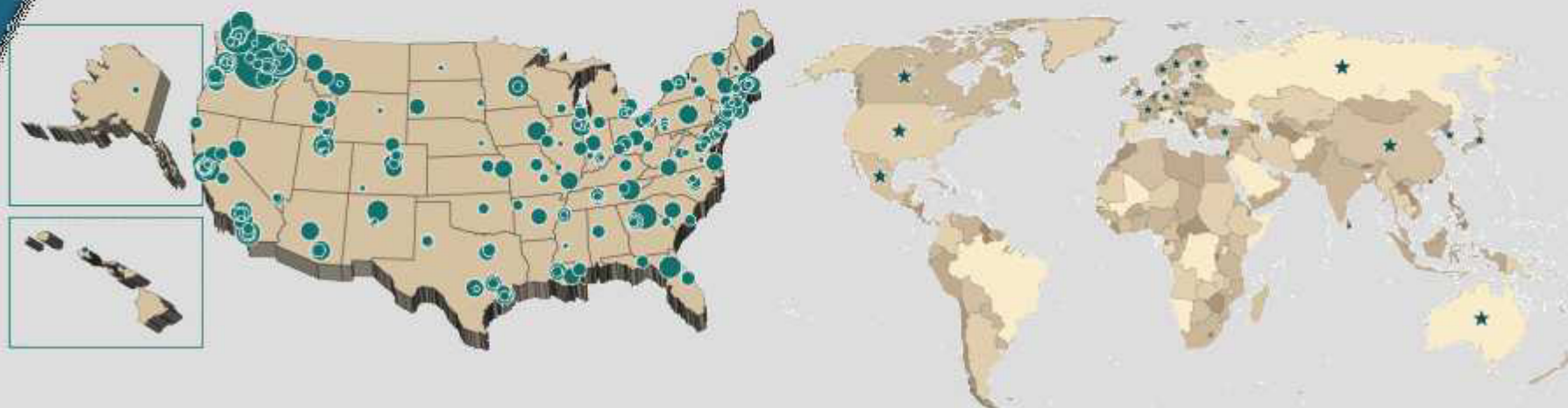
Scientists around the world submit research proposals using the web-based EMSL User System

OPEN RESEARCH is research where the results are published and shared broadly within the scientific community. There is typically no charge to use the facility for open research

PROPRIETARY RESEARCH may be conducted in EMSL under a proprietary sales contract. Users engaged in proprietary research are obligated to pay the full-cost recovery rate for use of the facility



EMSL User Demographics, FY02-FY04



Extraordinary Tools & Staff



► EMSL Facilities

- Chemistry & Physics of Complex Systems
- Environmental Spectroscopy & Biogeochemistry
- High Field Magnetic Resonance
- High Performance Mass Spectrometry
- Interfacial & Nanoscale Science
- Molecular Science Computing

► Support

- Computer and Network Services
- Instrument Development Laboratory
- User Services and Outreach

EMSL Provides Extraordinary Tools, Techniques, and Staff to Users

- ▶ Development of unique capabilities and methodologies
- ▶ Integration of tools, techniques, and scientific consulting
- ▶ Enabling a problem-solving environment



EMSL's scientific impact

Publications

1873 Peer Reviewed Publications
since FY98

Science, PNAS, Nature

More than 18 Journal Covers

Intellectual Property

95 Patents, multiple license
agreements

Award-Winning Research

Multiple R&D100, FLC Awards,
Discover



Accessing EMSL

- ▶ Via EMSL web site
 - www.emsl.pnl.gov
- ▶ Via User services
 - userservices@emsl.pnl.gov
 - 509-376-2553
- ▶ Online proposal application process

